Mr. W. W. Saunders exhibited a dragon-fly which had been captured flying over the Atlantic 600 miles from land, by Mr. Stephenson.

A memoir by Mr. Stevenson on the Entomological peculiarities of New Zealand was read. After commenting upon the peculiarities of the climate and the vegetation of New Zealand, the author remarks, that the opinion that there are but few insects in New Zealand is erroneous; the great masses of vegetation requiring vast numbers of insects to keep them in check, and hasten their decay when dead by boring into the timber more or less superficially; the Tetramera in fact form three-fourths of the Coleoptera. Only two Cicindelæ were observed, and but few Carabidæ and Brachelytra. The Elateridæ were more numerous, but no Buprestidæ were met with. The Clavicornia also are not numerous, and but very few Lucanida* and Cetonia, no traces of Geotrupida, and only two or three Heteromera. Some of the Curculionida are of singular forms; some species allied to Brentus burrow in the larva state into the hard wood of trees, and the Longicornes are very abundant; the larvæ of some of the larger species being eaten by the natives either in a raw or half-roasted state. Two Coccinella and two Forficula only were captured, and only seven or eight species of Hymenoptera, including a species of Bee, with large burthens of farina on its hind legs. Five or six species of Libellula and three of Cicada were observed, and a large formidable-looking apterous Gryllus (Deinacrida, White), which is very abundant in old trees, secreting itself in crevices of the bark. The small grasshoppers are numerous. In Diptera, the carrion flies perform a more important part in nature, as scavengers, than elsewhere. Tipulidæ and musquitoes abound, but there are decidedly but few Lepidoptera, some of which are very analogous to the English species, such as the Painted Lady and Red Admiral Butterflies.

ZOOLOGICAL SOCIETY.

Oct. 14, 1845.—William Yarrell, Esq., Vice-President, in the Chair.

The following extract was read from a letter, dated Madeira August 18, 1845, received from the Society's Corresponding Member, the Rev. R. T. Lowe:—

"The Rev. R. T. Lowe has the pleasure of adding to the Society's collection a fine specimen of a new Zeus (Zeus conchifer, Lowe) of the greatest rarity; the present being the second example only which has hitherto occurred."

The specimen was exhibited to the Meeting.

"On the genus Anous, Leach (Megalopterus, Boie)." By John

Gould, Esq., F.R.S. &c.

There is no family of birds more generally diffused over the globe than the Terns, and certainly no group of the Natatorial Order less understood, or which would more amply reward the studious investi-

[•] Mitophyllus irroratus, Parry, was found under bark.

gation of the scientific ornithologist. The present short paper is limited to some species of the genus Anous, for the purpose of describing three or four new ones, rather than aiming at anything like a complete monograph of even this little group. It will not, however, detract from the interest of the paper if I give a list of the species with which I am familiar, and reserve to some future time the completion of the subject. Upon the present occasion I shall exhibit five well-defined species; a sixth, of which I am not aware that an example exists in the museums of this country, is figured in the 'Planches Coloriées' of M. Temminck. They are—

- 1. Anous stolidus: Sterna stolida, Linn.; Gavia fusca, Brehm; Anous niger, Steph.
- 2. Anous leucocapillus, nov. sp. A. vertice et nuchd albis; loris, et partibus circumocularibus, intensè nigris; omni inferiore corpore alisque fuliginosis, necnon occipite, dorso, et caudd, sed cinereo tinctis.

Crown of the head and nape of the neck white; lores and space surrounding the eye deep black; near the posterior angle of the upper and lower eyelids a small patch of white; breast, all the under surface and the wings deep sooty black; back of the neck, back and tail the same, slightly tinged with ash; bill black; feet brownish black.

Total length, 14 inches; bill, $2\frac{1}{4}$; wing, 9; tail, 5; tarsi, $\frac{7}{8}$; middle

toe and nail, $1\frac{1}{2}$.

Hab. North coasts of Australia.

3. Anous melanops, nov. sp. A. vertice et nuchd pallide cinereis; dorso saturate griseo; maculd ante oculum, alteraque mi-

nore post oculum intensè nigris.

Crown of the head and back of the neck light ash-colour, passing into deep grey on the mantle and back; immediately before the eyes a large patch, and behind a smaller one, of jet-black; posterior half of the lower and a smaller space on the upper lash snow-white; throat, fore-part of the neck and all the under surface deep sooty black; wings and all the upper surface of the same colour, but rather browner; bill black; tarsi and toes brownish black.

Total length, 12 to 13 inches; bill, $2\frac{1}{4}$; wing, $8\frac{3}{4}$; tail, 5; tarsi, $\frac{7}{8}$;

middle toe and nail, $1\frac{1}{2}$.

Hab. Very abundant during the breeding season on the Houtman's

Abrolhos, off the western coast of Australia.

Remark.—This species, although very nearly allied to, is distinct from the Anous tenuirostris (Sterna tenuirostris, Temm.) of Western Africa, from which it may at once be distinguished by the black marks before and behind the eye, of which no trace is represented in M. Temminck's figure in the 'Planches Coloriées'; neither is this conspicuous mark alluded to in his description. It is just possible that this may be the species described by M. de la Fresnaye in Guerin's Magazine, under the generic name of Procellosterna.

- 4. Anous tenuirostris: Sterna tenuirostris, Temm. Pl. Col. 202.
- 5. Anous cinereus, nov. sp. A. capite, collo, et corpore inferiore argentato-albis; parva plumarum linea oculum circumeunte nigra

ad rostrum, ad nucham alba; dorso, alis, caudaque læte griseis;

secondariis ad apices albis.

Head, neck and all the under surface silvery greyish white; round the eye a narrow ring of feathers, the anterior half of which is deep black and the posterior half white; back, wings and tail light grey; secondaries tipped with white; bill black; tarsi and toes brownish black; interdigital membrane yellowish.

Total length, 11 inches; bill, $1\frac{1}{2}$; wing, 8; tail, 5; tarsi, $1\frac{1}{8}$;

middle toe and nail, 13.

Hab. The north-eastern coasts of Australia.

Syn. Pelecanopus pelecanoides, Brit. Mus. Coll. Part iii. p. 180.

6. Anous parvulus. A. toto corp orecinereo-griseo; parvo plumarum annulo oculum cingente, parte anteriore nigra, posteriore alba. The whole of the plumage ashy grey, being somewhat lighter on the head and neck than on the other parts of the plumage; round the eye a narrow ring of feathers, the anterior half of which is black and the posterior half white; bill black; tarsi and toes brown.

Total length, $9\frac{1}{2}$ inches; bill, $1\frac{1}{4}$; wing, $6\frac{1}{2}$; tail, $4\frac{1}{4}$; tarsi, $\frac{7}{8}$;

middle toe and nail, $1\frac{1}{4}$.

A single specimen forms part of the collection of the Zoological Society, to whom it was presented by F. Debell Bennett, Esq., who procured it at Christmas Island, in the South Seas. It may be distinguished from all the other species by its small size and delicately-formed bill.

Mr. Gould then exhibited two new birds from New South Wales:

Podargus plumiferus. Pod. plumis nares tegentibus, quæ sunt in cristæ formam erectæ, nigro-fusco et albo alternatim fasciatis; mediá guld et pectore brunneo-albis, fusco minutè maculatis, nec aliter colli pectorisque lateribus, nec corpore subtùs, nisi singulis plumis lined saturatè fuscd in medio, et duabus maculis quadratis

ad apicem, ornatis.

Feathers covering the nostrils, which are erected into a tuft, alternately banded with blackish brown and white; all the upper surface mottled brown, black and brownish white, the latter predominating over each eye, where it forms a conspicuous patch; the markings are of a similar but of a larger kind on the wings, and on the primaries and secondaries assume the form of bars; tail similar but paler, and with the barred form of the markings still more distinct; centre of the throat and chest brownish white, minutely freckled with brown; sides of the neck and breast and all the under surface similar, but with a dark line of brown down the centre and two large nearly square-shaped spots of brownish white near the tip of each feather; bill and feet horn-colour.

Total length, 20 inches; bill, $2\frac{3}{8}$; wing, $9\frac{1}{2}$; tail, 10; tarsi, 1. In another specimen the markings are altogether of a much darker hue, particularly on the under surface, where the light markings are less distinct and more chestnut.

Hab. The brushes of the Clarence and MacLeay rivers of New

South Wales.

Remark.—This species differs from all its Australian allies by the more lengthened form of the tail and the conspicuous tuft of feathers which spring from the fore-part of the head, and it is from this character the specific name has been taken.

Platycercus splendidus. Plat. capite, colli lateribus, et medio pectore, coccineis; genis albis; dorso inferiore, et tectricibus caudæ superioribus pallide viridibus; lateribus pectoris, et abdomine

splendide flavis; crisso pallide viridi.

Head, sides of the neck and centre of the breast scarlet; cheeks white, faintly tinged with blue; feathers of the back and scapularies black, broadly margined with gamboge-yellow; lower part of the back and upper tail-coverts pale green; on the shoulder a patch of black; wing-coverts pale blue; primaries black, with the exception of the basal portion of the external web, which is rich deep blue; two central tail-feathers dark green at the base, passing into deep blue on the apical half of the external web, and tipped with black; the next on each side is black on the internal web, green at the base of the external web; blue for the remainder of its length, and slightly tipped with white; the remainder of the tail-feathers are deep blue at the base of the external, and black at the base of the internal web, the remaining portion of both webs being pale delicate blue, passing into white at the tip; sides of the breast and the abdomen bright gamboge-yellow; vent pale green in some, in others pale bluish green; under tail-coverts scarlet; irides dark brown; bill horncolour; feet mealy brown.

Total length, 12 inches; bill, $\frac{5}{8}$; wing, 6; tail, 7; tarsi, $\frac{3}{4}$.

Another specimen, probably immature, has the general colour similar, but has the head and breast pale yellow, interspersed with scarlet feathers.

Hab. Darling Downs, New South Wales.

Remark.—Very nearly allied to, but a more beautiful species than, the *Platycercus eximius*, from which it differs in the extent of the scarlet on the breast, which in this species merely occupies the centre, while in the former it forms a broad band across the breast; the rump also is of a paler green.

"A Description of new species of Ostreæ, in the collection of H. Cuming, Esq.," by Sylvanus Hanley, Esq., was then read:—

Ostrea Chemnitzii. Ost. testa obovali, plerumque sinistrorsa, valde compressa, solida, nitida, lutea aut sordide rubro-purpurascente, subtuberosa, nonnunquam paululum subvesiculosa, nullis lamellis asperata; margine plicato, intusque persæpe scabro; plicis plerumque parvis; superficie interna albido-virescente; cicatrice satis magna, subreniformi. Long. 3 poll.

Hab. China? Mus. Cuming, Hanley, &c.

A species which is closely allied to rosacea, with a peculiar resinous gloss, and invariably attached by the entire surface of the lower valve. The colour varies from dirty yellow to dull reddish purple. The apices are not much attenuated. The figure 994 of Chemnitz is a fair representation.

Ostrea lacerata. Ost. testâ elongată, solidiusculă, valde inaquivalvi, haud lamellosă, ad nates acutas angustată, ad latera basimque lacerată; valvulă superiore planulată, sublavigată, aut lutescente radiis sordide rubro-purpureis ornată, aut rubro-purpured radiis duobus centralibus nigrescentibus aream angustam albidam includentibus; valvulă inferiore profundă, radiis latis atropurpureis strigată, costisque raris subangulatis armată; superficie internă albidă, submargaritaceă; cardine denticulis nullis munito. Long. 2 poll.

Hab. Senegal? Mus. Petit, Cuming.

Not unlike parasitica, but distinguishable by its claw-like lateral projections. I have never met with any valves attached by the entire surface. The dull crimson specimens, adorned with two central dusky rays, which usually enclose a narrow space of yellowish white, are peculiarly beautiful.

Ostrea multistriata. Ost. testá suborbiculari, compressá, æquivalvi, solidiusculá aut subtenui, vix lamellosá, brunneo-rufescente, confertissimè radiatim rugosá; superficie interná valvulæ superioris niveâ, purpureo marginatá; inferioris disco centrali rufo pulcherrimè tinctá; cardine dentibus validis munito; natibus haud eminentibus; cicatrice satis magná. Long. 3·3 poll.

Mus. Saul, Cuming, Hanley.

The lower valves were attached by their entire surfaces to a ship returning from the coast of Africa.

Ostrea Megodon. Ost. testâ falcata, glabra, solida, subæquivalvi, pallide livido-purpurascente, margines versùs plicata; plicis anticis 5 aut 6, maximis, subangulatis; posticis minimis, angulatis, paucis, subobsoletis; margine valde plicato, intusque magis minusve scabro; natibus incurvatis; superficie interna albo-virescente, nunquam margaritacea; cicatrice satis magna, reniformi. Long. 5 poll. Hab. Peru (Cuming). Mus. Cuming.

A rare and extraordinary species, which bears not the slightest resemblance to any of the recent Ostreæ. The narrow sickle-shaped contour and the gigantic marginal tooth-like folds form its most distinctive characteristics. The adult specimens are attached by their

apices only.

Ostrea Pes-tigris. Ost. testà ovali, aut ovali-subtrigonà, solidà, concolore, atro-purpureo aut rubro-purpurascente, undique sub-lamellosd, ad margines densè plicatà; lamellis imbricatis, confertis, depressis; plicis regularibus, rotundatis; valvis in longitudine paribus; inferiore profundà, superiore planulatà atque in costas planas sulcis latis remotis radiatim divisà; superficie internà albidà, margine interno denticulato; denticulis elongatis; cicatrice satis magnà, obovali aut suborbiculari. Long. 2 poll.

Hab. Isle of Luzon; on rocks (Cuming). Mus. Cuming, Walton. In typical specimens the shell is subtriangular, from the anterior side sloping in a produced and straightish line, abruptly from the beaks. The sculpture is both elegant and peculiar, the extremely depressed ribs being divided by rather broad grooves, and assuming

a scalloped appearance at their edges, from the crowded sublamellar imbrications which cover the entire surface.

Ostrea bicolor. Ost. testd obovatd, nunquam elongatd, subtenui aut solidiusculd, subcompressd, vix lamellosd, purpureo-fuscescente radio uno vel radiis duobus albidis ornatd; margine simplici; natibus subacutis; superficie internd, albidd colore externo marginatd; cardine denticulis nullis munito. Long. 2½ poll.

Hab. Senegal? Mus. Cuming, Hanley.

As the few specimens I have yet examined of this elegant species have been attached by the entire surface to the sheathing of vessels, I am unable to describe the characteristics of the lower valve. The lamellæ, when existing, are flattened, so that the shell presents a smooth surface, and appears inclined to expand laterally whenever unobstructed in its growth by adjacent substances.

Ostrea columbiensis. Ost. testá subinæquivalvi, subtenui, lamellosa, albida, purpureo radiata, subcompressa; valvula inferiore magis convexa; superficie interna albida, submargaritacea; cardine denticulis nullis munito; cicatrice satis magna, reniformi. Long. 2 poll.

Hab. St. Elena, West Columbia, adhering to rocks at half-tide

(Cuming). Mus. Cuming.

All the specimens I have seen are attached by the entire surface of the lower valve. The shape varies from oblong to suborbicular, and the valves are of equal length, but the shelly substance of the shallow upper valve fits into the lower one, and is only continued to the margin by the lamellæ, which, when the habitat permits, branch into wavy foliations.

Ostrea Callichroa. Ost. testá obovatá aut suborbiculari, solidiusculd, subæquivalvi; valvulá superiore purpureo alboque lutescente radiatá, concentrice lamellosá; lamellis depressis; valvulá inferiore magis minusve purpureo tinctá, costisque radiantibus subobtusis dense armatá; superficie interná, albá; margine simplici; cardine denticulis distinctis munito. Long. 2 poll.

Hab. Island of Chiloe, adhering to stones at low-water mark

(Cuming). Mus. Cuming.

The general appearance is that of our edible oyster, but the colouring is magnificent.

October 28.—George Gulliver, Esq., F.R.S., in the Chair.

A paper was read containing "Descriptions of new species of Shells," by Lovell Reeve:—

Murex maculatus. Mur. testá ovatá, subpyramidali, anfractibus brevibus, tuberculato-varicosis, varicibus interstitiisque subtiliter liratis, liris, lirarum interstitiis quoque pulcherrimè fimbriato-cancellatis; albidá, maculá rubido-fuscá inter varices conspicuè tinctá; columellá et aperturæ fauce pallidè rosaceá; canali breviusculo, recurvo.

Hab. — ?

The whorls of this species are strongly tubercled by the varices, which are very delicately cancellately ridged across.

Murex rusticus. Mur. testá ovatá, spirá acuminato-turritá, anfractibus medic tumidis, transversim subobscure liratis, tuberculatovaricosis, varicibus frondosis, frondibus brevibus, interstitiis minutissime squamatis; lutescente-albá, varicibus nigricante-fuscis; aperturá parvá, limbo producto; canali breviusculo.

Hab. ---?

A rather solid shell, with an elevated tubercled spire.

Murex turritus. Mur. testá trigono-ovatá, liris convexis subnodosis irregularibus confertis undique cingulatá, tuberculo unico inter varices, trifariam varicosá, varicibus peculiariter laminatofrondosis, frondibus erectis, lateraliter convexis; lutescente lividoolivaceo hic illic saturatiore tinctá.

Hab. North Australia; Ince, R.N.

The entire surface of this interesting new species is encircled with very close-set convex ridges, each terminating on the varices in an erect frond, connected together at the side so as to form a continuous laminated frill extending from the suture to the base. From Mr. Cuming's collection.

Murex crocatus. Mur. testd trigono-fusiformi, transversim lirata, liris parvis, granoso-squamatis, tuberculo inter varices; trivaricosd, varicibus frondosis, frondibus obtuso-ramosis; canali subelongato, frondoso, fuscescente, frondibus rubido-crocatis.

Hab. --- ?

An olive-brown shell, with varices of a bright saffron colour. From Mr. Norris's collection.

Murex pudoricolor. Mur. testá abbreviato-fusiformi, obliquè trigonâ, transversim liratâ, liris singulis tuberculis duobus, basim versus evanidis, inter varices, linea minutâ elevata inter liras; trivaricosa, varicibus rotundatis, prominentibus, squamis frondibusque prototomis basim versus præcipuè, pulcherrimè ornatis; eximiè rubente.

Hab. Island of St. Thomas, West Indies.

An interesting blush-coloured shell, received from M. Grüner of Bremen, of which I have since observed specimens in the British Museum from the island of St. Vincent.

Murex Pleurotomoides. Mur. testa pyriformi-ovata, anfractibus superne depressis, transversim liratis et minutissime crispatosquamatis, multifariam varicosis, varicibus muricato-squamatis; canali subelongato, patulo; columella labroque intus dentatis, labro superne sinuato; albida aut flavicante.

Hab. ---?

A small pyriform prickly shell, having a sinus in the upper part of the lip, after the manner of a *Pleurotoma*.

MUREX PISTACHIA. Mur. testa ovata, subfusiformi, solidiuscula, anfractibus rotundatis, sulco subobsoleto prope suturam cinctis,

transversim crebriliratis, longitudinaliter suboblique unduloso-varicosis, varicibus obtusis; custaneo-fuscescente, columella et aperturæ fauce subrosaceis; canali brevi.

Hab. ---?

A small chestnut-brown shell, quite distinct from any hitherto described.

Murex eurypteron. Mur. testa ovato-oblongâ, basim versus contracta, spirâ breviuscula, acuminato-turrita, suturis subexcavatis; anfractibus supernè depressis, transversim obscurè obtuso-liratis et punctato-striatis, tuberculo superficiario inter varices; trivaricosâ, varicibus tenuibus, erecto-alatis, ultimo latissime expanso, supernè falcato-recurvo; apertura parva, ovata; canali breviusculo.

Hab. Japan?

For this new and remarkable shell I am indebted to the kindness of the Rev. W. R. Crotch, whose manuscript name eurypteron, from $ev\rho v$, widely extended, and $\pi\tau\epsilon\rho v$, wing, I feel great pleasure in adopting, as being peculiarly expressive of its curious alate growth. It approaches nearest to the Murex falcatus, but in that species there are five varices on a whorl, whilst in this there are but three, and the winged expansions of the Murex falcatus are folded over at the superior margin. The specimen above described, and which is, I believe, unique, was received from Holland, and is supposed to have come from Japan.

The following paper, entitled "Déscription de quelques nouvelles Nérites Fluviatiles, du cabinet de H. Cuming, Esq.," par C. A. Récluz, was then read:—

I. NERITÆ SUBHEMISPHÆRICÆ.

1. Nerita Rossmassleriana. Ner. testá subhemisphæricá, convexá, luteo-fulvá, nigro irregulariter reticulatá; anfractu unico lævissimè perlongum striato; peritremate ovato-rotundato, basi obtusè anguloso; aperturá croceá; columellá planissimá, declivi, margine acuto, in medio subarcuato et obsoletissimè 3-4-denticulato.

Hab. ----?

Alt. 10, lat. 18, convex. 10 mill.

Nerita violacea, Gmelin; Ner. crepidularia, Lamk.
Var. β. Testâ elliptica, luteo-pallidá, violaceo-nigricante reticulata; apertura nigricante; peritremate continuo.
Hab. —— ?

II. SERRATÆ.

A. Globosæ.

3. Nerita sobrina. Ner. testá globoso-ovatá, lutescente, lineis nigris distantibus latiusculis undatis vel angulato-flexuosis fulgurantibusque pictá; anfractibus tribus, ad suturam nigro-marginatis; spirá semisphæricá; columellá convexiusculá, supernè plus

minusve callosd, infernè compresso-subcanaliculatd, margine rectd, vix denticulatd; labro semi-elliptico, intus incrassato.

Hab. Cayenne?

Alt. 20, lat. 23, conv. 15 mill.

B. Ovatæ vel ovato-oblongæ.

4. Nerita zelandica. Ner. testá ovato-oblongá, ventricosá, tenuiusculá; anfractibus 3-4 supremis sæpiùs derosis, infimo subsuturá horizontaliterque compresso; nigrá lineis ravidis longitudinalibus angulato-flexuosis creberrimis pictá, interdum lutescente supernè et infernè latè fasciatá; columellá subcompressá, croceá, margine denticulatá et in medio vix arcuatá; labro tenui, margine sordidè rubente, intus lacteo ac parùm incrassato.

Hab. New Zealand: on stones in mountain-streams.

Alt. 19-20, lat. 18-19, conv. 12 mill.

MISCELLANEOUS.

ON A NEW GENUS OF DOGS. BY J. E. GRAY, ESQ.

CYNALICUS, Gray.

Cutting teeth $\frac{6}{2}$, slightly and unequally 3-lobed, the outer on each side and in each jaw larger: canines conical, hooked. Grinders $\frac{5\cdot5}{6\cdot6}$, the three false grinders oblique, diverging; the flesh tooth thick, broad, with a very small lobe on the front of the inner edge; the tubercular grinder rather large, oblong, transverse, 3-tubercled: the four lower false grinders in a regular series, the tubercular grinders small, roundish.

The head large, the legs short, thick. Toes 5-4; claws compressed, curved, rather elongated, rather acute. Tail moderate, rather

bushy, reaching to the heel.

This genus agrees with Cuon in the shortness and broadness of the face and of the skull, and in the absence of the second hinder tubercular grinder in the lower jaws, but differs from it in this tooth being also absent in the upper one. In this latter character it agrees with Hyæna, but is at once known from that genus by the larger size of the upper tubercular grinder and the number of the lower grinders.

CYNALICUS MELANOGASTER.

Fulvous, face and back slightly blackish, varied; chest, lower parts of sides, belly, limbs and tail black.

Hab. Brazils. British Museum.

Length of body and head 26 inches; of tail 5 inches; entire 31 inches.

I may here remark that Canis sumatrensis and Canis alpinus, the red wolves of Sumatra and Siberia, belong to the genus Cuon. Canis simensis, the long-nosed Abyssinian wolf, is a true dog, but the face of the skull is very narrow, and even more elongated than that of the